



## PATENT APPLICATION

FORM PTO-1449

LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.

100203431-1

SERIAL NO.

10/664,256

APPLICANT

BASH et al.

FILING DATE

September 17, 2003

GROUP

## REFERENCE DESIGNATION

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
MT	6,205,799 B1	Mar. 27, 2001	Patel et al.	62	132
	6,182,742 B1	Feb. 6, 2001	Takahashi et al.	165	104.33
	6,108,201	Aug. 22, 2000	Tilton et al.	361	689
	5,943,211	Aug. 24, 1999	Havey et al.	361	699
	5,924,198	Jul. 20, 1999	Swanson et al.	29	890.1
	5,907,473	May 25, 1999	Przilas et al.	361	699
	5,724,824	Mar. 10 1998	Parsons	62	171
	5,718,117	Feb. 17, 1998	McDunn et al.	62	64
	5,434,606	Jul. 18, 1995	Hindagolla et al.	347	45
MT	5,278,584	Jan. 11, 1994	Keefe et al.	346	140 R
	5,220,804	Jun. 22, 1993	Tilton et al.	62	64

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION	
						YES	NO

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

MT	Sehmbe, M.S., Pais, M.R. and Chow, L.C., "Effect of Surface Material Properties and Surface Characteristics in Evaporative Spray Cooling," THE JOURNAL OF THERMOPHYSICS & HEAT TRANSFER, July-September, 1992, Vol. 6, No. 3, pp 505-511.
MT	Pais, Martin R., Chang, Ming J., Morgan, Michael J. and Chow, Louis C., "Spray Cooling of a High Power Laser Diode, SAE AEROSPACE ATLANTA CONFERENCE & EXPOSITION, DAYTON, OHIO, 1994, pp 1-6.
MT	Morgan, Michael J., Chang, Won S., Pais, Martin R. and Chow, Louis C., "Comparison of High Heat-Flux Cooling Applications," SPIE, 1992, Vol. 1739, pp17-28
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5/15/05  
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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
ms	4,794,410	Dec. 27, 1988	Taub et al.	346	140 R
	4,685,308	Aug. 11, 1987	Welker et al.	62	171
	4,683,481	Jul. 28 1987	Johnson	346	140 R
	4,576,012	Mar. 18, 1986	Luzenberg	62	157
	4,559,789	Dec. 24, 1985	Riek	62	157
	4,500,895	Feb. 19, 1985	Buck et al.	346	140 R
	4,490,728	Dec 25, 1984	Vaught et al.	346	1.1
	4,352,392	Oct. 5, 1982	Eastman	165	104.25
	4,290,274	Sep. 22, 1981	Essex	62	157
	4,141,224	Feb. 27, 1979	Alger et al.	62	514 R
ms	2,875,263	Feb. 24, 1959	Narbut	174	15

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ms	Lee, Chin C., and Chien, David H., "Thermal and Package Design of High Power Laser Diodes," IEEE, 1993, Ninth IEEE Semi-Therm Symposium, pp 75-80.
ms	Sehmbey, Mainder S., Chow, Louis C., Pais, Martin R. and Mahefkey, Tom, "High Heat Flux Spray Cooling of Electronics," AMERICAN INSTITUTE OF PHYSICS, January, 1995, pp 903-909.
ms	Mudawar, I. and Estes, K.A., "Optimizing and Predicting CHF in Spray Cooling of a Square Surface," JOURNAL OF HEAT TRANSFER, August, 1996, Vol. 118, pp 672-679.

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EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS
MT	2,858,355	Oct. 28, 1958	Narbut	174	15
	2,849,523	Aug. 26, 1958	Narbut	174	15
	2,643,282	June 23, 1953	Greene	174	15
	5,992,159	Nov. 30, 1999	Edwards et al.	62	64
	5,797,274	Aug. 25, 1998	Jackaman et al.	62	171
	5,247,426	Sep. 21, 1993	Hamburgen et al.	361	705
M	5,212,975	May 25, 1993	Ginzburg	72	43

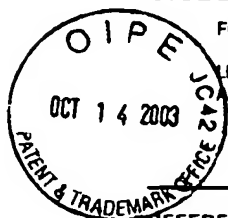
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	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	TRANSLATION	
						YES	NO

## OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

WJ	Denney, D. Lawrence, "High Heat Flux Cooling Via a Monodisperse Controllable Spray", A Thesis Presented to The Academic Faculty of Georgia Institute of Technology in Partial Fulfillment of the Requirements for the Degree Master of Science in Mechanical Engineering, March 1996.
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WJ	6,393,853 B1	May 28, 2002	Vukovic et al.	62	259.2
	6,349,035 B1	Feb. 19, 2002	Koenen	361	719
	6,205,023 B1	Mar. 20, 2001	Moribe et al.	361	704
	5,640,302	June 17, 1997	Kikinis	361	687
	5,473,506	Dec. 5, 1995	Kikinis	361	688
	4,825,337	Apr. 25, 1989	Karpman	361	386
	5,658,387	Aug. 19, 1997	Reardon et al.	118	323
	6,595,014 B2	Jul. 22, 2003	Malone et al.	62	171
	6,604,370 B2	Aug. 12, 2003	Bash et al.	62	171
	6,612,120 B2	Sep. 2, 2003	Patel et al.	62	171
WJ	6,484,521 B2	Nov. 26, 2002	Patel et al.	62	171

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						YES	NO
WJ	EP 509844 A1	10/1992	Yamamoto et al.	165	104.33		
WJ	JP 56-137086	10/1981	Mikane et al.	165	104.33		X

## OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, etc.)

WJ	R. Hannemann, L. R. Fox and M. Mahalingham, "Thermal Design for Microelectronic Components," in "Advances in Cooling Techniques for Computers" 245-276 (Win Aung ed., Hemisphere Publishing Corporation, 1991).
WJ	"Advances in Cooling Techniques for Computers" 150-153 (Win Aung ed., Hemisphere Publishing Corporation, 1991).
WJ	Robert Darveaux and Iwona Turlik, "Backside Cooling of Flip Chip Devices in Multichip Modules," ICMCM Proc. 230-241 (1992).

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mb	Herman W. Chu, Christian L. Belady and Chandrakant D. Patel, "A Survey of High-performance, High Aspect Ratio, Air Cooled Heat Sinks," International Systems and Packaging Symposium (1999).
mb	Chandrakant D. Patel, "Backside Cooling Solution for High Power Flip Chip Multi-Chip Modules," IEEE ECTC Proceedings 442-449 (May, 1994).
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